

A CATALOGUE OF PALÆARCTIC
LEPIDOPTERA.

Catalog der Lepidopteren des Palæarctischen Faunengebietes. I Theil: Famil. Papilionidæ—Hepialidæ. Von Dr. O. Staudinger und Dr. H. Rebel. Pp. xxxii + 411; portrait; II Theil: Famil. Pyralidæ—Micropterygidæ. Von Dr. H. Rebel. Pp. 368. 8vo. (Berlin: R. Friedländer und Sohn, Mai 1901.) Price Mk. 15 (paper); Mk. 16 (cloth).

THE publication of the third edition of Staudinger and Wocke's Catalogue of Palæarctic Lepidoptera is an event of considerable importance. In the earlier part of the last century, the catalogues of European Lepidoptera most in use were those of Boisduval, who published the first edition of his "Index Methodicus," including Papilio, Sphinx, Bombyx and Noctua (in the Linnean sense), in 1829; and the second edition, to which the Geometridæ were added, in 1840. The latter edition included 1941 species, among which are enumerated the few species then known from the Caucasus and Siberia; for Continental entomologists have always treated the insects of the adjacent countries as virtually forming part of the European fauna. In 1844 Duponchel published a more elaborate "Catalogue Méthodique des Lépidoptères d'Europe" (pp. xxx + 523), including the whole Order.

Between 1843 and 1851 the German entomologist, Heydenreich, published three editions of his "Systematisches Verzeichniss der europäischen Schmetterlinge," the last of which extends to 130 pages, double columns; and the first edition of the "Catalog der Lepidopteren Europa's und der angrenzenden Länder, I. Macrolepidoptera, bearbeitet von Dr. O. Staudinger; II. Microlepidoptera, bearbeitet von Dr. M. Wocke" was issued in a nearly similar form to Heydenreich's. It was published in Dresden in September 1861, and includes pp. xvi + 192 (double columns). This catalogue includes 5250 species in all; and the 1941 species of Macrolepidoptera enumerated by Boisduval in 1840 proved to have increased, in little more than twenty years, to 2583. This catalogue was very complete and carefully compiled (especially in its earlier portion, for Dr. Wocke's work is far inferior to Dr. Staudinger's), and it at once took its place as the standard catalogue of European Lepidoptera. This edition included no localities; but those species which did not occur within the geographical limits of Europe were marked with an asterisk. The title pages and preface were duplicated in French and German.

In another ten years (January 1871) a second and greatly improved edition was issued (pp. xxxviii + 426)—this time in single pages, except that a side column is devoted to full localities of each species and variety. The number of species enumerated had now risen to 2849 Macrolepidoptera and 3213 Microlepidoptera, or 6062 in all. The catalogue includes the species of Europe, North Africa, Asia Minor, Transcaucasia, Siberia as far as the Amur, and Greenland and Labrador, but is yet very far from including the whole of the Palæarctic region; for Dr. Sclater's epoch-making paper on the geographical distribution of the class Aves was only published in vol. ii. of the *Journal of the Linnean Society* in 1858, and did

not attract the attention of entomologists till some years afterwards.

This second edition of 1871 has long been out of print, and for many years Dr. Staudinger had been making preparations for a new edition, to include the bulk of the Palæarctic fauna, a work rendered much more arduous by the immense increase in entomological literature, as well as by the large number of new species discovered during the last thirty years. The work has, however, been finally carried to a successful conclusion by Dr. Rebel, Dr. Staudinger's old colleague, Dr. Wocke, having predeceased him by some years.

The present edition includes a portrait of the late Dr. Staudinger, a German preface by Dr. Rebel, chiefly relating to the preparation of the work, a tolerably full bibliography and list of geographical names, and a sketch of the system adopted, which, we may say, without being absolutely revolutionary, exhibits profound modifications from that used in the earlier editions of the catalogue. Then follows the bulk of the work, comprising (allowing for supplementary additions) 4756 Macrolepidoptera and 4963 Microlepidoptera, or 9719 species in all.

The present catalogue now includes the Lepidoptera of the greater part of the Palæarctic region and the circumpolar region. Among the most important additions to the districts included in the second edition are the Nile Delta to Cairo; Asia, to the northern frontiers of Thibet, and the lower course of the Hoang Ho to the Chingan Mountains; North Manchuria and the whole district of the Ussuri; North Japan (not southern Japan, in which case Corea and the greater part of China must also have been included); Central Asia, Palestine, Persia, &c. A few varieties of species noticed, which occur beyond these limits, have also been included. These are marked with an asterisk; but we regret that the strictly European species are not, as in previous editions, indicated by the presence or absence of any special mark.

Dr. Rebel appears to have done his work very completely, English and other works published in 1900 being quoted in the addenda. We notice references to pp. 552 and 581 of the *Transactions* of the Entomological Society of London for that year.

The two parts of the work are separately paged and have separate title-pages, but are bound in one volume. The indices are very bulky, occupying no less than 102 pages of the second volume; the index of families and genera fills sixteen pages, in double columns; and the index of species, varieties, aberrations and synonyms fills no less than 86 pages of very small type in triple columns.

We need hardly say that the work before us will be an absolutely indispensable handbook to all Lepidopterists who are working at any part of the Palæarctic fauna for many years to come—probably till it is superseded by a new edition. At the same time, we cannot expect any book to be absolutely complete or faultless. To have made the bibliography complete would have been impracticable, and we notice that some books not included in it are quoted in the catalogue. Again, we notice the omission of various varietal names; but some entomologists consider that the naming of varieties has been carried much too far of late years, both in Lepidoptera and in

Coleoptera. A certain amount of discretion as to what to include and what to omit, as well as in the selection of synonyms, must be conceded to every cataloguer. A few misprints are corrected at the end of the book, and we have noticed others; but they are not of a character to interfere in any way with the usefulness of the book, and an occasional misprint is absolutely unavoidable in a work of such an extent, and including such a vast amount of minutè detail.

W. F. K.

AN EPITOME OF MODERN CHEMISTRY.

Modern Chemistry. Part i. *Theoretical Chemistry.* Pp. 126; Part ii. *Systematic Chemistry.* Pp. 203. By William Ramsay, D.Sc. The Temple Primers. (London: J. M. Dent and Co., 1900.) Price 1s. each.

GIVERS of inexpensive Christmas remembrances—something more than a card and less than a present—have made us very familiar with the small volumes of the Temple series, and at a first glance the title pages of the two books before us seem to promise selections from Epictetus or De Quincey rather than an exposition of modern chemistry by a living authority. In the first of the volumes Prof. Ramsay has given an extremely condensed account of the present state of chemical theory, and in the second an equally condensed account of systematic chemistry. Both books bear the marks of freshness and originality, and, it must be added, both produce a certain feeling of breathlessness. They are eminently readable to a chemist, and extremely interesting as displaying a sort of camera obscura picture of the territory of chemistry as it is presented in the mind of one of the most active, most unconservative and most distinguished of contemporary workers.

The question that forces itself most persistently upon a critic is—for what class of readers are these books intended? They are called primers, and the present writer, wishing to fortify his opinion that a primer was essentially a book for beginners, has found, on reference to a dictionary, that a primer is “a small elementary book for religious instruction or for teaching children to read.” He has, further, taken the trouble to put one of these primers into the hands, not of a child, but of a friend of more mature years and not wholly strange to scientific notions, with the request that he would see what he could make of it. The answer came quickly and in unmistakable terms. The word primer has really no justification in connection with these books; they are in no wise suited to beginners. To those who are working in one little corner of chemistry with their eyes averted from all that is going on elsewhere, and to workers in other sciences who at one time have known a fair amount of chemistry, Prof. Ramsay’s survey may be just what they have been wanting. Considering the limits of space imposed, he has given a wonderfully complete and connected account of the state of modern chemistry. The book on theoretical chemistry is naturally the more readable of the two, and it forms a more continuous story. The systematic chemistry exhibits and classifies the facts of chemistry in a way which is striking and interesting and well suited for retrospective purposes. Stress must be laid upon this last qualification, for it is to be feared that a reader who had not already a very good grounding of

chemistry would be unable to make any headway in the subject if he started along the lines on which Prof. Ramsay has achieved his formidable task.

To those who wish to refresh their knowledge of chemistry or to look at it from a new point of view, and to those who wish to gain some idea of the very important changes which have been affecting the whole science during the past fifteen years, Prof. Ramsay’s little book may be warmly recommended. Such readers will carry away some knowledge at least of “phases,” electro affinity, the later developments of stereochemistry and many other innovations; and they will see, with mixed feelings perhaps, how the modern electrochemical theory is changing the whole language of the science.

A. S.

OUR BOOK SHELF.

Essays, Descriptive and Biographical. By Grace, Lady Prestwich. With a memoir by her sister, Louisa E. Milne. Pp. 266. (Edinburgh and London: William Blackwood and Sons, 1901.) Price 10s. 6d.

LADY PRESTWICH, who survived her husband, Sir Joseph Prestwich, but little more than three years, died in 1899 at the age of sixty-six. They were married in 1870, and settled at Shoreham, near Sevenoaks, in the charming house of Darent-Hulme, built by Prestwich. While he was professor of geology at Oxford, many months in each year were spent in that ancient home of learning, and there Prestwich was constantly assisted by his wife in the preparation, not only of his standard work on geology, but also of his lectures, diagrams and geological papers. Herself an authoress, she had exhibited considerable literary ability in her two novels, “The Harbour Bar” and “Enga,” and in a number of essays printed in *Good Words*, *Blackwood’s Magazine*, the *Leisure Hour*, &c. Some of these are here reprinted. There are “Recollections of Boucher de Perthes,” being the history of the discovery of Palæolithic implements; “Evenings with Madame Mohl,” or reminiscences of a Paris salon; “An Evening with Mrs. Somerville”; some account of the parallel roads of Glen Roy, and essays on physiography, all pleasantly and instructively written. One article not previously published is on the old almshouse of Ewelme, and another is on the Findhorn, especially attractive to Lady Prestwich, as her earliest home was in Morayshire, on the banks of this, perhaps the grandest of Scottish rivers.

In the memoir, which has been attractively written by Miss Louisa Milne, we have the record of the life of a good and highly cultured woman, a life comparatively uneventful, it is true, but the record will be found full of interest to those who had the privilege of knowing Lady Prestwich, while others who peruse this volume will derive instruction, always pleasantly conveyed, and make acquaintance with a charming personality. Amid her many occupations, Lady Prestwich found time for much active benevolence and for work relating to the higher education and employment of women. In her younger days she travelled much with her uncle, Dr. Hugh Falconer, and reminiscences of these journeys are extracted from her diary. An interesting essay on “our white deal box” tells the story of the trouble they had in passing this box through the custom-house at Naples, as it contained mysterious plaster casts of the head and bones of a rhinoceros. Even the letters F.R.S. after Falconer’s name puzzled the officials. “Royal Society sounded well, but how was the word Fellow to be rendered in French or Italian? I had to be careful, since it could be interpreted in more than one sense. A little heedlessness on my part might bring on my uncle the same